

PROCESS SCREENING EVALUATION
OF INDUSTRIAL WASTE TOXICANT
DISCHARGERS

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SAUGET, ILLINOIS

Report to

Enforcement Division
U. S. Environmental Protection Agency
Region V
Chicago, Illinois

by

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I. INTRODUCTION

This report presents the results of a screening study of the Sauget, Illinois POTW and of selected Sauget Industries which discharge to that POTW. Industries identified as known or possible dischargers to the Sauget POTW include the following:

- Amax Zinc Company
- Cerro Copper Products Company
- Clayton Chemical Company
- Edwin Cooper Company
- Midwest Rubber Reclaiming Company
- Monsanto Chemical Company
- Rogers Cartage Company
- Sterling Steel Casting Company

The Sauget POTW influent flow consists almost entirely of industrial waste discharges, each with the potential to contain priority and other toxic pollutants.

The purpose of this study was to conduct an initial process evaluation screening of the Sauget POTW and of the industrial facilities discharging into that POTW, with the objective of providing a rapid but careful determination and analysis of all easily available information on these facilities relative to the potential for the presence, generation or discharge of any toxicants which could be hazardous to human health or the environment.

The study was accomplished in two phases. In the first phase, files and documentation from the U.S. EPA Region V were reviewed to extract background information on the subject

7. Midwest Rubber Reclaiming Company recovers rubber from old tires and scrap butyl and "light" color rubber. The basic processes involved are grinding, devulcanization, roll-milling and baling. One EPA monitoring study detected several organic toxicants in the Midwest Rubber effluent, which discharges to the Sauget POTW at 0.75 MGD.
8. Although Monsanto Chemical Company was not site-visited during this study, a limited amount of information on the facility was extracted from USEPA-V files. Monsanto produces a wide variety of aromatic compounds. Although the company has taken steps to reduce its waste volume and constituents, Monsanto is indicated to be a major discharger of toxicants to the Sauget POTW.
9. Rogers Cartage Company is a hauler of industrial chemicals. The company has no information on the constituents (i.e. individual chemical compounds) of the materials hauled. Rogers Cartage washes all trucks on site with a recirculated caustic solution, which is dumped to the Sauget POTW each three weeks. Truck rinse waters also discharge to the POTW.
10. Sterling Steel Casting Company reclaims scrap steel, to produce carbon and low alloy steel castings. There are no process effluents discharged to the Sauget POTW.
11. Although this study revealed that waste characterization data or the characteristics of individual industrial

X. ROGERS CARTAGE COMPANY

Rogers Cartage Company transports a wide variety of chemical products, amounting to a total of approximately 22 million pounds per month. Some of the products they carry are 'dedicated' to a particular vehicle. These dedicated trucks are rarely cleaned, as they always carry the same material. Among dedicated products are: Food grade material, anhydrous ammonia, phthalic anhydride, Sanithin solution, sulfuric acid, waste chemicals, chlorosulfonic acid, and propane. The remainder of the products transported, in particular, fatty acids, caustic soda, plastisizers, and petroleum treating compounds, are washed from the trucks after product delivery. Washing is with hot caustic (50%), which is recycled, followed by a hot water wash, which is sewerred. The caustic is sewerred about once every three weeks. In some cases, only a hot water wash is used. One month's total washing amounts to about one million gallons. On a daily basis, for a 5-day/week operation, the average discharge is 45,000 gpd.

Names of specific chemical compounds discharged were not known to Rogers Cartage, as their customers are not required to provide them with detailed specification sheets. Although it is not known if Rogers Cartage is a discharger of toxic organic or inorganic pollutants, there is a high probability that both the spent caustic and postcaustic wash rinse waters contain at least some regulated constituents. In addition, it

is probable that the interim heat batch dumping of spent caustic is one source of the high pH excursions experienced by the Sauget POTW.